



Advisory Council

Wednesday, February 10, 2021



Welcome & Roll Call

- Welcome from Commissioner Reed & Senator Hewitt
- Dr. David Lafargue, LaSTEM Program Administrator
 - Roll Call
 - Minutes Approval
 - New Member Introduction – Tina Watts



Council Discussion

Regional STEM Network Center Update

- Applications Received, awarded, and entering 2nd Phase
 - Region 1 – GNO Inc.
 - Region 4 – ULL
- RSNC Center/Director Status
 - Region 2 – LSU in agreement finalization phase
 - Region 3 – Fletcher Community College, RSNC awarded and director hired
 - Region 5 – CPSB, RSNC awarded and director hired
 - Region 6 – Northwestern, RSNC awarded and beginning interview process
 - Region 7 – SCiPort, RSNC awarded and beginning interview process
 - Region 8 – LaTech, RSNC awarded and beginning interview process
 - Region 9 – Southeastern, RSNC awarded and currently posting job position



Showcase Presentations

- Microsoft TEALS program – Lucia Berliner, Regional Manager and Specialist for the Microsoft Philanthropies TEALS Program
- Cybersecurity Education Management Council (CEMC) update – Greg Trahan, CEMC Chair
- LDOE Environmental Education update – Morgan Crutcher, Policy Advisor with the Governor's Office of Coastal Activities



Showcase Presentations

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TEALS Program

Build and grow computer science in
your school with TEALS

Please take a moment to introduce
yourself in the chat!



Henry Ford Academy, Detroit MI

Team-teaching computer science

Computer science (CS) skills prepare students for in-demand roles and open pathways to economic opportunity. But the students who need these skills most, are the least likely to have access to rigorous CS courses.





TEALS Program

TEALS (Technology Education and Literacy in Schools) is a Microsoft Philanthropies program that pairs trained computer science (CS) professionals with high school teachers to help build CS teaching capacity. TEALS Program provides:

- A community of teachers and volunteer industry professionals working together.
- Rigorous curricula and resources developed by CS educators and industry professionals.
- A pathway for all students and teachers to learn CS content.
- Resources and training to develop diverse and inclusive classrooms.
- Personalized support from a dedicated Regional Manager.
- Remote or in-person volunteer support.

www.Microsoft.com/TEALS | lucia@tealsk12.org

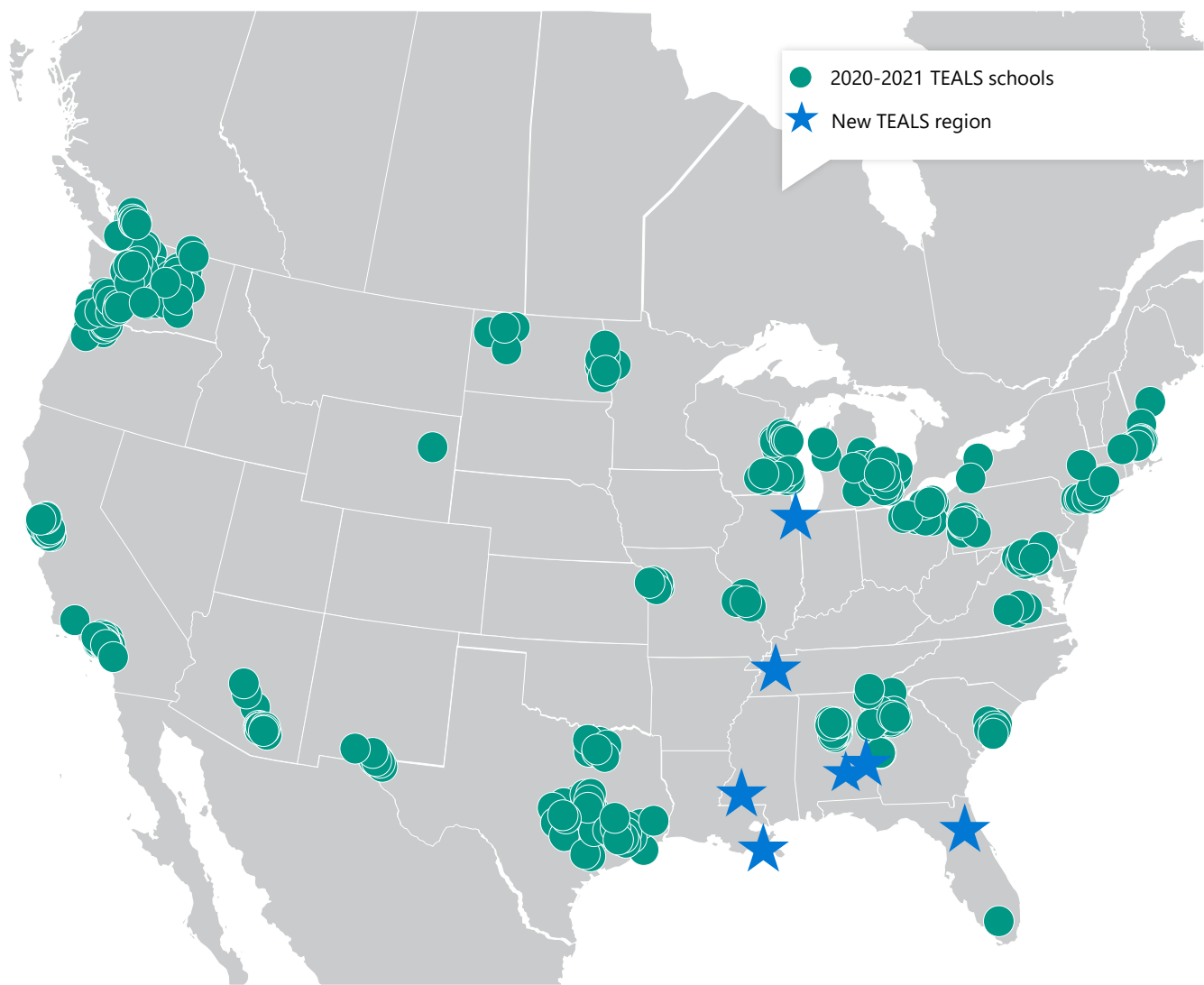


Brooklyn College Academy, Brooklyn NY

Expanding the TEALS Program

For ten years, the TEALS Program has brought CS education to over **85,000 students** across 29 states, the District of Columbia, and British Columbia, Canada.

We are excited to announce that we are expanding the TEALS Program **in 6 new regions** to significantly increase our reach among Black and African American students.



By the Numbers

Schools

*2020-2021 school year



455

TEALS schools



590

CS classes



43

TEALS Alumni Schools

Students



10,000

Students



35%

Female

Volunteers



650

Companies



1,500

Tech volunteers



TEALS Volunteers

Volunteer recruitment and retention are a joint effort between schools and TEALS

Volunteers from 650+ companies across many industries are represented

Trained in instruction, teaching, and working with students



Medgar Evers College Preparatory, Brooklyn, NY

How TEALS supports your school

	Co-Teach model	Lab support model	Graduation
Who's doing the teaching?	<p>Teacher: 10 → 80%</p> <p>Volunteer: 90 → 20%</p>	<p>Teacher: 80% → 99%</p> <p>Volunteer: 20 → 1%</p>	<p>Teacher: 100%</p>
Teacher's role	<ul style="list-style-type: none"> • Classroom and teaching team management • Learning computer science • Completing all assignments • Leading lessons at their capacity 	<ul style="list-style-type: none"> • Classroom and teaching team management • Leading 80%+ of lessons • Continue refining CS understanding 	<ul style="list-style-type: none"> • Teaching computer science independently of TEALS
Volunteer team engagement in the classroom	4-5 days a week	2-5 days a week	Online community of expert volunteers

Remote instruction

TEALS offers options for remote or in-person volunteer support. Using remote instruction, TEALS volunteers participate using video conferencing software that is selected by the school.

What your schools needs to teach remote

- Sufficient bandwidth, headsets, and webcams to connect students with volunteers.
- TEALS training for teachers and their teaching teams to prepare for remote instruction.
- Your school's IT liaison for initial installation and ongoing support.

How it Works

- Students and teacher log into virtual classroom.
- Volunteers lead interactive instruction during the class period.
- During lab time, volunteers meet 1:1 with students.






Smithville High School, Smithville Texas

TEALS supported curricula categories

	Introduction to Computer Science	AP Computer Science Principles	AP Computer Science A
Description	A semester or full-year course that explores a variety of basic computational thinking and programming concepts through a project-based learning environment.	A full-year course covering the fundamentals of computing including creativity, programming and global impact. All curriculum providers cover the same major areas of study.	A full-year course focused on object-oriented programming and problem solving in Java. Equivalent to a first-semester, college level course in computer science.
Models Supported	Co-Teach and Lab Support	Lab Support	Co-Teach and Lab Support
Where can I learn more?	aka.ms/TEALSintro	aka.ms/APCSPprinciples	aka.ms/APCSA

Diversity and inclusion

TEALS provides partner schools with strategies and resources to help increase equitable participation in high-quality computer science education. TEALS works with schools to create an action plan and make progress towards the following diversity and inclusion outcomes:

Inclusive learning space 	Diversity in enrollment 	Inclusive instruction 
Creating learning environments that are accessible and welcoming of students' identities, backgrounds, differences and perspectives without barriers or judgment.	Ensuring CS courses and programs have student enrollment rates that reflect the demographics of the larger school or community population, particularly in terms of race, ethnicity, gender and disability status.	Instructional practices and learning experiences that actively take into account the context of youth in terms of interests, identities, cultural and linguistic practices, and histories.
EXAMPLES OF SCHOOL COMMITMENTS		
<ul style="list-style-type: none">• Incorporate inclusive signals such as posters of role models from different backgrounds or displaying computer science in a creative way.	<ul style="list-style-type: none">• Create awareness of CS at your school by discussing how CS relates to other subjects or host a session to debunk CS myths.	<ul style="list-style-type: none">• Emphasize student engagement with peer and buddy programming and providing students the choice to help choose projects.
Learn more by reading our Guide to Inclusive Computer Science Education at aka.ms/TEALS-InclusiveGuide		

School partnership requirements

Potential school costs	<ul style="list-style-type: none">• Costs incurred by volunteers (e.g. background check).• Curricular resources (if using a partner curriculum provider that charges a cost).• Remote teaching equipment (as applicable).
Class meeting time	<ul style="list-style-type: none">• First period of the day.
Diversity, Equity, and Inclusion	<ul style="list-style-type: none">• Schools must fill out a copy of the Diversity and Inclusion Planning Guide.
TEALS volunteer recruitment	<ul style="list-style-type: none">• Engage with the local community and your school's/district's network to share this volunteer opportunity.
Data sharing	<ul style="list-style-type: none">• TEALS classroom demographics.• Student and teacher course experience survey.• AP scores (if applicable).
Recruit classroom teacher	<ul style="list-style-type: none">• 2+ years teaching experience.• Attends required curriculum training and TEALS training.• Commits to becoming a CS champion in the school.• Teacher is Team Lead
Identify school staff partners	<ul style="list-style-type: none">• School administration contact.• District contact (as applicable).• IT liaison (as applicable).

Next Steps:

1

Identify

Classroom Teacher
School Administration Contact
District Level Decision Maker

2

Apply

Learn more: Microsoft.com/TEALS

TEALS helped open up new opportunities for Arabia, enabling her to graduate from Smith College with a degree in CS and Studio art.

“TEALS changed my life not only because it taught me how to code. It also showed me that even though something like computer science may be hard, you can still be good at it—and it can still be worthwhile.”

Arabia Simeon, student
Brooklyn, NY





Showcase Presentations

- Cybersecurity Education Management Council (CEMC) update – Greg Trahan, CEMC Chair

Overview

SB79

2020 Regular Session - Senate Bill No. 79 / Sen. Abraham

Creates "...special fund for the purpose of funding degree and certificate programs in cybersecurity fields offered by public postsecondary education institutions in order to meet the state's workforce needs."

CEMC Progress To Date

2020

- Sep 17: Kickoff
- Nov 17: RFA Discussion -> Working Doc
- Dec 2: Discussion with LCA Cybersecurity Group
- Dec 18: Working Doc Feedback -> Draft RFA

2021

- Jan 26: RFA Working Day
- ~ Feb 8-14: Finalize RFA
- ~ **Feb 15: RFA Release Date**
- Apr 30: Submission Deadline
- May 14: Decisions/allocations

RFA: About

GOAL

Workforce-Focused

Projects supported by the Fund must “[D]evelop, train, produce, and retain Louisiana’s workforce-ready cybersecurity professionals and improve cyber literacy across industry sectors.”

Range: postsecondary education and beyond, including reskilling, upskilling, and skills refinement.

GUIDING PRINCIPLES

Established Cybersecurity Frameworks






NIST Cybersecurity Framework



NICE Cybersecurity Workforce Framework



NICCS™

	Analyze Performs highly specialized review and evaluation of incoming cybersecurity information to determine its usefulness for intelligence.	Specialty Area ▼
	Collect and Operate Provides specialized denial and deception operations and collection of cybersecurity information that may be used to develop intelligence.	Specialty Area ▼
	Investigate Investigates cybersecurity events or crimes related to information technology (IT) systems, networks, and digital evidence.	Specialty Area ▼
	Operate and Maintain Provides the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security.	Specialty Area ▼
	Oversee and Govern Provides leadership, management, direction, or development and advocacy so the organization may effectively conduct cybersecurity work.	Specialty Area ▼
	Protect and Defend Identifies, analyzes, and mitigates threats to internal information technology (IT) systems and/or networks.	Specialty Area ▼
	Securely Provision Conceptualizes, designs, procures, and/or builds secure information technology (IT) systems, with responsibility for aspects of system and/or network development.	Specialty Area ▼

RFA: Requirements and Tracks

PRACTICAL OUTCOMES

Measurable, Impactful, and Collaborative

Projects supported by the Fund must:

- Develop new and/or incumbent cyber workforce
- Detail pathways to and roles/competencies for employment
- Monitor and report student/graduate success
- Include 25% private (non-public) funds match
- Align closely to standards (certifications or certificates) and recognize frameworks
- Support participation and success of underrepresented groups
- Describe potential follow-on grant opportunities (Federal and private support)

TRACK 1

Student Projects

Foundational cybersecurity skills

Existing or new programs

Certifications or certificates

Experiential or work-based learning

Recruiting and preparation

Industry skills engagement

Improving access and success of underrepresented groups

Improving access and success of Veterans

Pathways for instruction or education

TRACK 2

Incumbent Workforce and Adult Education Projects

Reskilling/upskilling/skills refinement

Certifications or certificates: incumbent workers and adult learners

Career shifts and measurable pathways between industries

Workforce-ready programs with industry

Wraparound engagement service models

Improving access and success of underrepresented groups

Improving access and success of Veterans

Identifying and (re)engaging candidates not in workforce (cyber recruitment)

Pathways for instruction or education



Showcase Presentations

- LDOE Environmental Education update – Morgan Crutcher, Policy Advisor with the Governor's Office of Coastal Activities

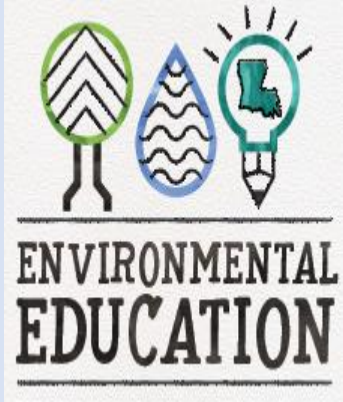


ENVIRONMENTAL
EDUCATION



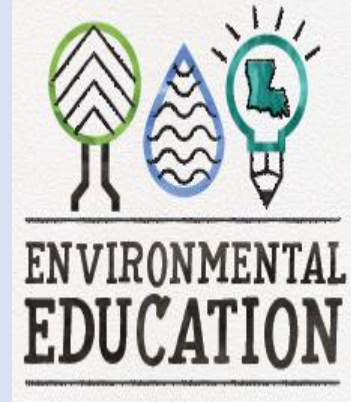
Commission

Environmental Literacy Plan



LEEC Statutory Mandate

- Develop, review, approve, and transmit a **plan for environmental education** to the governor, the legislature, and the public.
- **Advise and assist** the state superintendent of education, the governor, the legislature, the secretary of the Department of Environmental Quality, and other state agencies, including university extension services, conservation and environmental organizations, community action groups, and nature and environmental centers **on policies and practices needed to provide environmental education.**
- **Serve as a forum for the discussion and study** of problems that affect the environment and environmental education.
- Assist and obtain information from various sources to **coordinate the environmental education programs of federal and state agencies.**

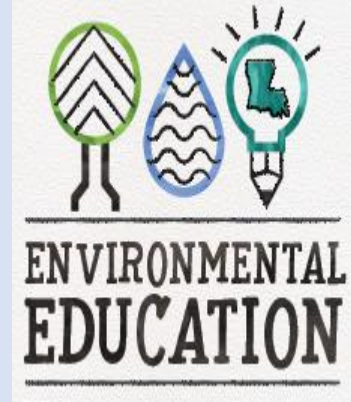


Cause for ELP Revision

- Move from LDWF to LDOE calls for us to recontextualize our mandate in this new position
- LDOE Initiatives
- Science Standards Revision
- LEEC Strategic Planning Process Results
- Acknowledge the work of the Commission to date
- Recognize the work around climate and resilience at the state level
- Global pandemic pushing classes outdoors and online

As leaders, pausing and reflecting enables us to ask what our role really is, how to more effectively empower others to be the best at the roles they are supposed to play and, therefore, what we should really get involved with.

*-Ana Dutra
Harvard Business Review*

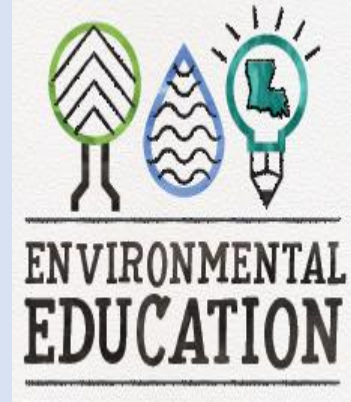


Systemic Environmental Education

- Environmental Protection and Sustainability Pathway
- Principles and Concepts integrated into multiple disciplines
- Environmental Education Partner Guide and Quality Rating Tool
- Science Standards Revisions

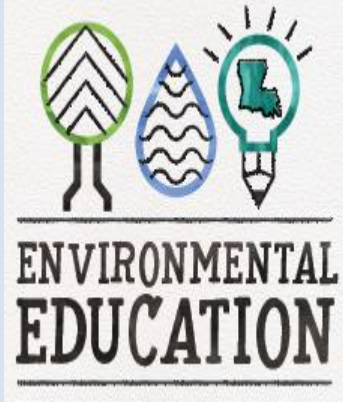
“If you want to have any significant impact, you have to do it within the system.”

John White



Vision

To establish a population that understands, feels connected to, and is inspired to protect, conserve, preserve, enhance, and restore our environment for present use and future sustainability. Environmentally literate citizens have the knowledge, tools, and motivation to thoughtfully explore environmental issues, select optimal actions to mediate problems, and appreciate the interconnectedness between man-made and natural environments.

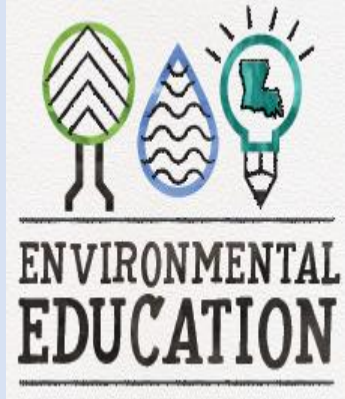


Mission Statement

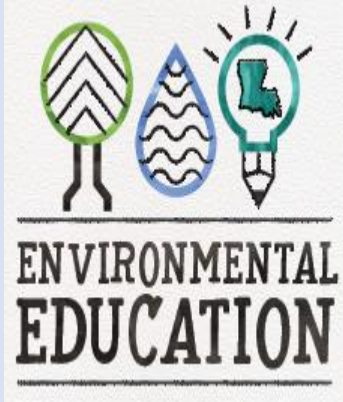
People depend on natural systems. As part of these natural systems, humans may influence their function to the benefit or detriment of both. Decisions regarding environmental issues can be complex, involve many factors, and exist at the individual, community, national, and global levels.

Our mission is to foster an approach to education that promotes the above understanding through a continuum of environmental learning opportunities that incorporate a comprehensive and coherent environmental education experience, both in and out of school, for *all* Louisiana students.

ELP Development Draft Timeline



2021	February	Vision Document Presented to Full Commission
2021	Spring	Regional Scoping Meetings for Input into EE Solicitation for Work Group Participation
2021	Summer/Fall	Work Group Meetings and Recommendations Dev't Strategies Team Synthesis of recommendations into actionable work plan for LEEC
2022	February	Draft ELP Released for Public Comment Presentation to Full Commission Regional Meetings Legislative Outreach
2022	May	Final ELP Released Presentation to Full Commission with Changes Full Commission Approves Legislature Approves Send to Governor



ELP Work Groups (Tentative)

- Expanding the Reach of Environmental Literacy
- Driving Availability and Use of High Quality Instructional Materials
- Facilitating Integration between Formal and Nonformal Education
- Building Connections between Secondary and Post-Secondary
- Defining Learning Outcomes and Assessment of Environmental Literacy
- Cultivating Sustainable Funding Sources for Environmental Literacy
- Ensuring Availability of High Quality Professional Development for Educators
- Promoting Equity and Diversity (Advisory Committee)

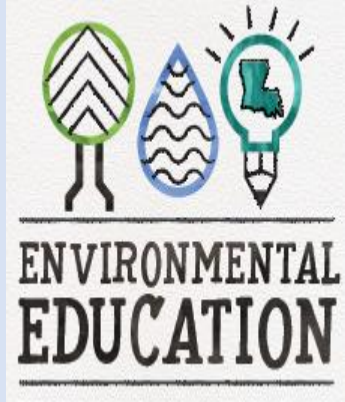


Questions?

Morgan Crutcher
LEEC Commission Member
Co-Chair Environmental Literacy Plan Committee
Policy Advisor, Governor's Office of Coastal Activities

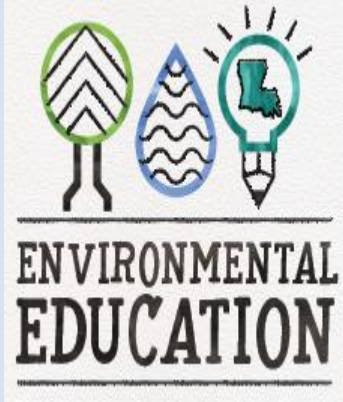
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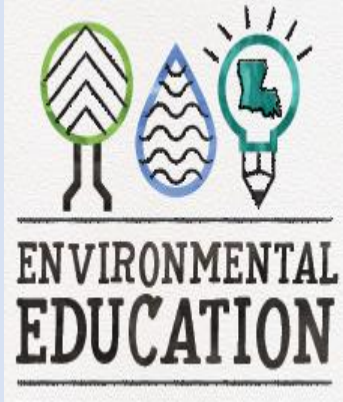
ELP Committee Members

- Brian Gautreau, YWP, Co-Chair
- Morgan Crutcher, GOCA, Co-Chair
- Breigh Rhodes, DoE
- Brenda Nixon, LEEA
- Cole Ruckstuhl, USGS
- Dinah Maygarden, UNO PIES
- Heather Egger, 4-H
- Jen Roberts, USACE
- Jessica Dixon, CRT
- Kea Sherman, Sherman Law
- Kelia Bingham, APC
- Pierre LaCaze, Vice Prinicipal
- Robin Dufilho, LDNR
- Thomas Gresham, DoE



Advance Strategic Planning Priorities

- Prime mover and expert facilitator of big things in Louisiana EE
- New level of commissioner engagement and contribution
- Focus on K-12 education
- Support resources for educators and schools
- Promotion, awareness building, and LEEC brand development
- Build comprehensive set of partnerships
- Increase available financial resources (i.e. corporate partnerships, GOMA, NOAA, philanthropies, foundations, etc.)



ELP Next Steps

- Vision Document
- Establish workplan and timeline for the ELP Committee
- Schedule a committee kickoff meeting where we will:
 - Review Document Outline
 - Review Workplan and Timeline
 - Assign Roles and Responsibilities



Other Business

- LaSTEM Quarterly Meetings for 2021
 - Wednesday, May 13, 2021 – 10:00 am – 12:00 pm
 - Wednesday, August 18, 2021 – 10:00 am – 12:00 pm
 - Wednesday, November 10, 2021 – 10:00 am– 12:00 pm
- New Business



Next LaSTEM Meeting

May 13, 2021 at 10:00 am

Thomas Jefferson Room
Claiborne Building – pending
health crisis



Educate

ELEVATE

Innovate

Louisiana